

What is claimed is:

1. A dolorimeter for quantifying a pressure or a force applied to a patient by a hand of a practitioner, said dolorimeter being an integral unit comprising:

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a housing for coupling to a suitably selected releasable retention means;

a pressure/force sensor having a property which varies according to pressure or force applied to said sensor, said sensor for coupling to said housing, the sensor being sized and of suitably selected material to promote substantial tactile communication between the hand of the practitioner and the patient so to allow the practitioner to monitor manually the application and location of pressure or force applied;

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a reporter coupled to said housing, said reporter for electronic communication with said pressure/force sensor, such that in use, the pressure or force applied by the practitioner's hand is reported as a quantified output.

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2. The dolorimeter of claim 1, more specifically for quantifying a pressure or a force applied to a patient by a digit of a practitioner, wherein said sensor is sized and of suitably selected material to promote substantial tactile communication between the digit of the practitioner and the patient.

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3. The dolorimeter of claim 1 or 2, wherein said pressure/force sensor is an electrical sensor selected from the group consisting of a resistance sensor, a capacitance sensor and an inductance sensor.

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4. The dolorimeter of claim 1 or 2, wherein said pressure/force sensor is a fibre optic sensor.

5 5. The dolorimeter of any one of claims 1 to 4, wherein the pressure/force sensor is a pressure sensitive film.

6. The dolorimeter of claim 5, wherein the pressure sensitive film is on a flexible substrate.

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7. The dolorimeter of any one of claims 1 to 6 further comprising a releasable retention means coupled to said dolorimeter, for releasably retaining said dolorimeter from the hand of the practitioner.

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8. The dolorimeter of claim 2, further comprising a releasable retention means coupled to said dolorimeter forming a band sized to fit the practitioner's digit.

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9. The dolorimeter of any one of claims 1 to 8 further comprising a suitably selected electronic signal processor for operable communication with said pressure/force sensor and said reporter.

10. The dolorimeter of claim 9 wherein said suitably selected electronic signal processor is selected to quantify the force or pressure exerted on said sensor for providing a signal representing the pressure or force applied to the member.

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11. The dolorimeter of claim 10 wherein said suitably selected electronic signal processor comprises a microprocessor for providing said signal representing the pressure applied to said sensor to said reporter.
- 5 12. The dolorimeter of claim 11 further comprising an analogue to digital converter for providing said signal representing the pressure applied to said sensor from said analogue to digital converter to said reporter.
- 10 13. The dolorimeter of any one of claims 10 to 12 wherein said suitably selected electronic signal processor is comprised of means for tracking said signal and for holding automatically said signal in a state representing a highest value of pressure or force applied to said sensor.
- 15 14. The dolorimeter of claim 13, wherein said means for tracking and holding is reset when said signal crosses a threshold value.
- 15 15. The dolorimeter of any one of claims 1 to 14, wherein said reporter has a digital display.
- 20 16. The dolorimeter of any one of claims 1 to 14, wherein said reporter has an at least one light emitting display.
- 25 17. The dolorimeter of any one of claims 1 to 14, wherein said reporter is a sound emitting reporter.

18. The dolorimeter of claim 17 wherein said sound emitting reporter is a piezoelectric speaker.

19. The dolorimeter of any one of claims 1 to 14 wherein said reporter is a radio wave emitting reporter.

20. The dolorimeter of any one of claims 11 to 19, further comprising a power management centre for operative communication with said microprocessor.

21. The dolorimeter of any one of claims 11 to 21, further comprising a calibration table memory for operative communication with the microprocessor.

22. The dolorimeter of claim 21 further comprising an initiator for signaling that calibration of said calibrating table memory may proceed.

23. The dolorimeter of claim 22, wherein the initiator is an electronic initiator.

24. The dolorimeter of claim 23 wherein said initiator is selected to be responsive to an external magnetic force.

25. The dolorimeter of any one of claims 11 to 24 further comprising a programme memory for operative communication with the microprocessor.

26. A dolorimeter for quantifying a pressure or a force applied to a patient by a digit of a practitioner, said dolorimeter being an integral unit comprising:

a housing for coupling to a suitably selected releasable retention means;

5 a pressure/force sensor having an electrical resistance which varies according to pressure or force applied to said sensor, said sensor for coupling to said housing, the sensor being sized and of suitably selected material to promote substantial tactile communication between the digit of the practitioner and the patient so to allow the practitioner to monitor manually the application and location of pressure or force applied;

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a reporter coupled to said housing, said reporter for electronic communication with said pressure/force sensor;

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a suitably selected electronic processor for operative communication with said sensor and said reporter such that in use, the pressure or force applied by the practitioner's digit is reported as a quantified output.

27. A method of quantifying pressure applied to a patient by a practitioner using a dolorimeter comprising;

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releasably retaining said dolorimeter on the practitioner's hand, said dolorimeter being suitably selected to promote substantial tactile communication between the hand of the practitioner.

and the patient;

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palpating the patient with said dolorimeter;

manually determining the application and location of pressure or force applied; and

5 measuring the pressure applied to the patient.

28. The method of claim 27, comprising releasably retaining said dolorimeter on a finger of a practitioner.

10 29. The method of claim 28, comprising releasably retaining said dolorimeter on an index finger.

30. The method of any one of claims 27 to 29, further comprising setting the dolorimeter at a predetermined pressure/force setting prior to palpating.

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31. The method of any one of claims 27 to 30 further comprising calibrating said dolorimeter with a suitably selected calibrator prior to use.

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32. The method of claim 31 wherein calibration is initiated by an initiator means.

33. A dolorimeter for assessing a force or pressure applied to an evaluation region by an evaluator, comprising:

a sensor responsive to the applied force and configured to provide

25 substantial tactile communication between the evaluator and the evaluation region;

a reporter in communication with the sensor and configured to produce an indication associated with the applied force; and

a retainer configured to fix the sensor and the reporter to the evaluator so that the sensor and the reporter are within a common visual field of the evaluator.

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34. The dolorimeter of claim 33, further comprising a housing, wherein the sensor and the reporter are fixed to the housing.

35. The dolorimeter of claim 34, wherein the retainer is configured to fix the housing to a digit of the evaluator.

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36. The dolorimeter of claim 33, wherein the retainer is configured to fix the sensor and the reporter to a digit of the evaluator.

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37. The dolorimeter of claim 33, further comprising a processor configured to produce an electrical signal associated with the applied force and to deliver the produced electrical signal to the reporter.

38. The dolorimeter of claim 37, wherein the reporter includes a numerical display configured to display a numeric value associated with the applied force.

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39. The dolorimeter of claim 37, wherein the reporter includes at least one visual indicator activatable by the processor based on the applied force.

40. The dolorimeter of claim 39, wherein the at least one visual indicator includes at least one light emitter.

41. The dolorimeter of claim 39, wherein the at least one visual indicator includes at least one light emitter associated with a first color and at least one light emitter associated with a second color.

42. The dolorimeter of claim 37, wherein the processor is configured to reset the reporter if the applied force is less than a predetermined reset value.

43. The dolorimeter of claim 33, wherein the reporter is configured to indicate that the applied force exceeds a predetermined value.

44. A dolorimeter for assessing a force or pressure applied to an evaluation area of a subject by an evaluator, comprising:

a sensor responsive to an applied force and configured to provide substantial tactile communication between the evaluator and a portion of the subject to which the force is applied;

an audio reporter in communication with the sensor and configured to produce an audio indication of the applied force; and

a retainer configured to fix the sensor to the evaluator so that the sensor is situated between the evaluation area and the evaluator.



45. A method of quantifying a force applied to a subject by an evaluator, comprising;

applying a force to an evaluation area of the subject with a hand of the evaluator;

assessing a magnitude of the applied force based on a force sensor situated to

5 promote substantial tactile communication between the hand of the evaluator and the evaluation area; and

obtaining an estimate of the assessed applied force magnitude based on a reporter situated with a visual field that includes the evaluation area.

10 46. The method of claim 44, wherein the sensor is fixed to a digit of the evaluator.

47. 47. The dolorimeter of claim 16, wherein the at least light emitting display includes at least one light emitter associated with a first color and at least one light emitter  
15 associated with a second color.